

Quarterly Report – Public Page

Date of Report: January 22, 2009

Contract Number: DTPH56-08-T-000019

Prepared for: U.S. DOT/PHMSA

Project Title: Advanced Development of Proactive Infrasonic Gas Pipeline
Evaluation Network (PIGPEN)

Prepared by: NYSEARCH/Northeast Gas Association

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For quarterly period ending: December 31, 2008

Public Page Section

Activities/Deliverables Completed:

		SCH Date	CMPL Date
Task 1.2:	Second Quarterly Status Report – MILESTONE	12/31/2008	1/16/2009
Task 1.7:	NYSEARCH Management/Oversight – MILESTONE	12/31/2008	12/31/2008

The point of contact for coordination, preparation, and distribution of any press releases is George Janega, (212) 354 4790 Ext. 211, gjanega@northeastgas.org.

General Information

PIGPEN is based on infrasound detection, a technique used commonly for monitoring natural and manmade phenomena including avalanches, earthquakes, seismic waves, geomagnetic activity, ocean waves, severe weather, atmospheric turbulence, and volcanoes. Man-made infrasonic signals are generated by traffic, aircraft, heavy machinery, etc. Because of their low frequency, infrasound waves are less susceptible to dissipation than normal acoustic frequencies and travel long distances. Traditional infrasound sensors are large, susceptible to environmental effects, and expensive. PIGPEN employs innovative, inexpensive, rugged, high-sensitivity infrasound sensors developed originally by PSI for verifying nuclear treaty compliance, and integrates them with signal processors and communications hardware to form a pipeline encroachment detection system. The primary objective of the project is to advance PIGPEN technology to pre-production status by completing development of advanced algorithms, field testing in a range of pre-production scenarios and developing practical procedures for deploying and utilizing the technology.

Results and Conclusions: System assembly and testing occurred during the second quarter.

Plans for Future Activity: During the next quarter, data analysis for Task 1.2.3 will be complete. NYSEARCH will continue to interact with sponsors and project participants to begin field testing.